

REMARKS

In response to the Office Action dated December 23, 2003, Applicant respectfully requests reconsideration and withdrawal of the rejections of the claims.

The Office Action states that the Information Disclosure Statement filed May 22, 2000 fails to comply with the regulations, on the grounds that it does not include a concise explanation of the relevance of each listed patent that is not in the English language. As set forth in MPEP §609, subpart III.A(3), if a non-English reference was cited in a search report by a foreign patent office in a counterpart foreign application, the requirement for a concise explanation of relevance is satisfied by submitting an English-language version of the search report which indicates the degree of relevance found by the foreign office. The Information Disclosure Statement filed May 22, 2000 indicated that the references were cited in an International Search Report for a related PCT application, and was accompanied by a copy of that Search Report. For the Examiner's reference, a duplicate copy of the International Search Report is being submitted herewith. As can be seen, each of the references was cited under category "A". It is respectfully submitted that the Information Disclosure Statement complied with the requirement for a concise explanation of the relevance of the references. The Examiner is respectfully requested to consider each of the non-English references, and confirm such consideration for the record.

Claims 8-11 and 13 were rejected under the second paragraph of 35 U.S.C. §112, on the grounds that they were considered to be indefinite. In response thereto, claims 8 and 10 have been amended to remove the bases for the rejection.

In addition, other voluntary amendments have been made to the claims to improve their readability.

With respect to claims 9, 12 and 13, the Office Action states that the terms "these data" (claim 9) and "the data" (claims 12 and 13) lack sufficient antecedent basis. However, it is respectfully submitted that the antecedent basis for these terms can be found in claim 9, at line 2 ("the data stored in the first memory"), as well as in claim 1, line 8 ("data stored in the first memory"). Reconsideration and withdrawal of the rejection of claims 9, 12 and 13 is therefore respectfully requested.

Claims 1-6 and 8 were rejected under 35 U.S.C. §103, on the grounds that they were considered to be unpatentable over the *Campana et al* patent (U.S. Patent No. 5,602,915) in view of the *Peyret et al* publication. All other pending claims were rejected as being unpatentable over these two references in view of additional tertiary references. For the reasons presented below, it is respectfully submitted that the *Campana et al* and *Peyret et al* references do not suggest the present invention to one of ordinary skill in the art, even when considered in combination. Reconsideration and withdrawal of the rejections are therefore respectfully requested.

As set forth in the introductory portion of the specification, the claimed invention is directed to the management of data stored in a smart card, and is particularly concerned with the transfer of data from one card to another, such as in the case where the original card is about to expire and be replaced by a new card. As is conventional, a smart card provides secure access to the data stored on the card, by requiring a user to enter a secret code, such as a PIN. This code is compared with a code stored in the memory of the smart card, which is referred to in

the application as a management code. The present invention provides a method for generating a management code for the new card that is based upon information relating to the old card.

In contrast, the *Campana et al* patent is concerned with the ability of two cards to communicate with one another in a secure manner. As described in the background portion of that patent, it was known for a mother card to be able to communicate with each of a number of different daughter cards. However, secure transactions between two daughter cards were not possible. See column 1, lines 33-37 and 59-62. The *Campana et al* patent teaches a process by which each of two cards, e.g., two daughter cards, can mutually compute session keys, for communication with one another. As is well known, a session key is a temporary key that is used to encrypt data that is exchanged between two entities during a given communication session.

With reference to claim 1, the Office Action states that the secret number NS disclosed in the *Campana et al* patent corresponds to the first management code recited in the claim, and that such number is inherently stored in memory (at least temporarily during calculations). The Action acknowledges, however, that the *Campana et al* patent does not disclose authorization of the editing of data stored in the card memory if a secret code presented to the reader is compatible with the first management code. To this end, therefore, the rejection relies upon the *Peyret et al* publication, and alleges that it would be obvious to modify the teachings of the *Campana et al* patent to incorporate a comparing step before editing data in memory. It is respectfully submitted, however, that a combination of the teachings of the *Campana et al* patent and the *Peyret* article would not lead a person of ordinary

skill to the claimed subject matter, absent hindsight knowledge of the present invention.

While the *Peyret* article teaches that it is known to prevent access to the memory of a smart card until a secret code has been correctly presented, there is no teaching in either of the references to compare such a secret code, e.g., a PIN, to a secret number of the type NS disclosed in the *Campana et al* patent. As discussed previously, the only purpose for the secret number NS is to generate a session key for communications between two cards. The existence of the secret number NS is transitory; once the session key has been generated, the secret number NS is no longer needed. The secret number NS plays no role in the management of access to data stored on the card. Consequently, it does not function as a "management code," as that term is employed in the context of the present invention. More importantly, however, there is no teaching in either reference which suggests that a number which is temporarily calculated to produce a session key should be compared with a PIN entered by a user, to determine whether access to data stored in memory should be granted.

In summary, therefore, it is respectfully submitted that the secret number NS of the *Campana et al* patent has absolutely no relationship to the secret code disclosed in the *Peyret et al* publication for access to memory. The purpose of the secret number NS is to calculate a session key that is used for secure communications between two cards. There is no teaching in either reference to use this number to control access to data stored in memory. Accordingly, even if one were to apply the teachings of the *Peyret* article to the cards disclosed in the *Campana et al* patent, any logical combination of their teachings would not result in

the presently claimed invention. In other words, the combined teachings of the two references do not suggest that "editing of data stored in the first memory is authorized if a secret code presented to the reader is compatible with the first management code," where such management code is computed from a cryptographic algorithm and is based on identification data of a chip card, as recited in claim 1. At best, the *Peyret* publication discloses that the user must present a secret code, but it does not disclose how this secret code is computed. For similar reasons, the references do not suggest the step of "editing of the data stored in the second memory [of the second card] is authorized if a secret code presented to the reader is compatible with the second management code," again where this second management code is computed from a cryptographic algorithm and is based on data relating to both the first and second cards.

In addition to these distinctions, other differences between the claimed invention and the prior art are set forth in various dependent claims. However, in light of the fundamental nature of the distinctions set forth above, further discussion of these additional differences is believed to be unnecessary at this time. Furthermore, it is respectfully submitted that the tertiary references do not overcome these differences between the claimed invention and the teachings of the *Campana et al* and *Peyret et al* references.

In view of the foregoing, it is respectfully submitted that the pending claims are patentably distinct from the prior art of record. Reconsideration and withdrawal of the rejections are therefore respectfully requested.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

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By:



James A. LaBarre

Registration No. 28,632

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

INTERNATIONAL SEARCH REPORT

International Application No

PCT/FR 98/02510

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 G07F7/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 G07F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 426 541 A (THOMSON-CSF SCPI) 8 May 1991 see the whole document	1-3,6-12
A	WO 94 16415 A (D. SEILER) 21 July 1994 see abstract; claims; figures 1-5 see page 9, line 9 - page 13, line 31	1,6,8-12
A	EP 0 224 147 A (SIEMENS) 3 June 1987	
A	EP 0 671 712 A (BULL CP8) 13 September 1995	

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the international search

12 March 1999

Date of mailing of the international search report

19/03/1999

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

David, J

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/FR 98/02510

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0426541 A	08-05-1991	FR 2654236 A DE 69029921 D DE 69029921 T NZ 235926 A RU 2041498 C US 5162638 A	10-05-1991 27-03-1997 05-06-1997 27-06-1994 09-08-1995 10-11-1992
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